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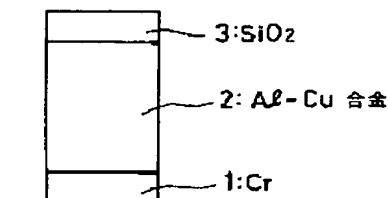
APPLICATION DATE : 15-07-91
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APPLICANT : OKI ELECTRIC IND CO LTD;

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TITLE : SURFACE ACOUSTIC WAVE FILTER



ABSTRACT : PURPOSE: To improve humidity resistance without damaging the characteristic of the surface acoustic wave filter (SAW-F) by forming an SiO_2 film having specified thickness at the top of an interdigital electrode.

CONSTITUTION: This SAW-F is equipped with Cr 1 to be an adhesive layer on the base, Al-Cu alloy 2 adding Cu to Al as an electrode layer, and SiO_2 film 3 to cover the surface of the Al-Cu alloy 2 as a protecting layer to protect the Al-Cu alloy 2. Namely, the Al-Cu alloy 2 constituting the interdigital electrode is covered with the SiO_2 film 3 having thickness 100Å - 1000Å , and a pattern is formed by lift-off. When the SiO_2 film 3 is thick, the characteristic is degraded since the surface acoustic wave vibration of the interdigital electrode is blocked and when the thickness is less than 1000Å , the level of a loss is not reduced so as to cancel the deviation of a frequency by making the film of the Al-Cu alloy 2 thin. When the SiO_2 film 3 is too thin, however, a humidity proof effect is lowered and therefore, the thickness more than 100Å is required.

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